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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/237,646 01/26/99 CASTELLI

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EXAMINER

TRUONG, C.

ART UNIT

PAPER NUMBER

2172

DATE MAILED:

10/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/237,646

Applicant(s)

CASTELLI ET AL.

Examiner

Cam-Y Truong

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3-8, 11 and 12 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

1. Claims 1-12 are pending in this Office Action.
2. Applicant's arguments with respect to claims 1-12 has been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graefe et al (or hereinafter "Graefe") (USP 6298342).

As to claims 1 and 9, Graefe teaches the claimed limitations:

"first searching said database to retrieve data based on said query" as searching the database and returns to the user a result, usually in the form of a relational table which matches the specifications of query (col. 1, lines 35-37);

"presenting retrieved data to user" as searching the database and returns to the user a result, usually in the form of a relational table which matches the specifications of query (col. 1, lines 35-37). This information shows that after searching the data is retrieved and the data is returned to user. The result is presented as retrieved data to user;

"receiving user input" as searching the database and returns to the user a result, usually in the form of a relational table which matches the specifications of query (col. 1, lines 35-37). This information indicates that the system have to receive the user input before searching the data;

"transforming said database based on said user input to generate a transformed database" as transform a database table from one perspective to another-to rotate the dimensions of the data-would be a valuable addition to the conventional capabilities of a query language such SQL. In this context, to rotate perspectives or dimensions means to interchange a dimension represented in a table as a set of columns with a dimension represented in a table as a set of columns with a dimension represented as a set of rows. For example, a user may even select data from a database table in the Microsoft Access database component of Microsoft as a rectangle of spreadsheet cell, transpose the cells, than transfer the cells, back into the Access database as a collection of records in the transposed format (col. 1, lines 62-67; col. 2, lines 1-25);

"successively searching said transformed database to retrieve data" as (col. 1, lines 62-67; col. 2, lines 1-25). Graefe does not teach the claimed limitation "repeating step b through e until the results for the said query is satisfied by the user". However, Graefe teaches that presenting these queries to a search engine, which searches the database and returns to the user a result. For example, a user selects a rectangle of cells, copies it into a temporary clipboard, points to a destination cell. User may even select data from a database table in the Microsoft Access database component of Microsoft as a rectangle of spreadsheet cell, transpose the cells, than transfer the cells, back into the Access database as a collection of records in the transposed format (col.

1, lines 62-67; col. 2, lines 1-25). This information implies that it is obvious that the system have to repeat step b through e in order to return to the user a result. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to modify Graefe's teaching in order to search or retrieve the data from database server and return the result to user's desire efficiency.

5. Claims 2, 10 are rejected under 35 U.S.C. 102(e) as being unpatentable by Graefe et al (or hereinafter "Graefe") (USP 6298342) in view of Li et al (USP 6175829).

As to claims 2 and 10, Graefe teaches the claimed limitation subject matter in claims 1, 9, except the claimed limitation "reformulating the query based on said user input and wherein said searching said transformed database comprises searching said transformed database based on said reformulated query". However, Li et al teach that selectivity of the alternative and the original criteria to reformulate query and additional types of feedback information may also be provided. With this feedback, the users know if the query criteria is too tight or too loose so that they can reformulate queries and retrieving a particular subset of images, which satisfy a condition specified in the sub-query (col. 5, lines 5-10; col. 3, lines 60-67- col. 4, lines 1-10). This information shows that in order to retrieve subset of images following user query, the system have to search images first by based on reformulate queries. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Li's teaching of reformulate query and retrieving images to Graefe's system in order to provide a reduction in expensive multimedia query processing.

Allowable Subject Matter

6. Claims 3-4 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 3 and 11, none of the available prior art of record teaches or fairly suggest extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said database as recited in claim 3 and 11. Index querying service is well known in the art as taught Balogh and Graefe. However, prior art such Balogh and Graefe do not teach "extracting indices from said database and wherein said searching is preceded by retrieving indices to focus said search on indexed information in said data" in the specific combination as recited in claims 3 and 11.

As to claim 4 and 12 are objected because they are dependent on claim 3 and 11.

As claim 5-8 are allowed.

As to claim 5, none of the available prior art of record teaches or fairly suggest at least ...a multidimensional indexing engine at said at least.....a similarity query engineretrieved indices from said multidimensional indexing engine for identifying

database areas to be search as recited in claim 5. Similarity engine and index generation component are well known in the art as taught by Bach and Graefe. However, prior art such Bach and Graefe do not teach "at leasta multidimensional indexing engine at said at least.....a similarity query engineretrieved indices from said multidimensional indexing engine for identifying database areas to be search" in the specific combination as recited in claim 5.

As to claim 6-8 are allowed because they are dependent claim 5.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to application's disclosure

Castelli et al (USP 6134541)

Contact Information

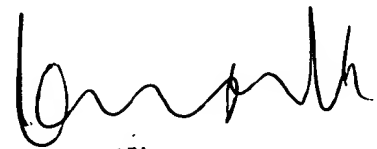
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu, can be reached on (703-305-4393). The fax phone numbers for the organization where this application or proceeding is assigned is (703-308-9051).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

CY

October 18, 2001



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100